DOCUMENT RESUME

ED 047 154 VT 012 609

TITLE	Bibliography of Training Aids. 2nd Edition.
INSTITUTION	Air Conditioning and Refrigeration Inst., Arlington, Va.
PUB DATE	Sep 70
NOTE	112p.
AVAILABLE FROM	Director of Manpower Development, Air-Conditioning and Refrigeration Institute, 1815 N. Fort Myer Drive, Arlington, Virginia 22209 ($1.00)
EDRS PRICE	EDRS Price MF-$0.65 HC-$6.58
DESCRIPTORS	*Air Conditioning, *Annotated Bibliographies, *Audiovisual Aids, High Schools, *Instructional Aids, Post Secondary Education, *Refrigeration

ABSTRACT

A revision of ED 018 650, this annotated bibliography prepared by the Air-Conditioning and Refrigeration Institute lists training materials, films, and ancillary visual aids available from 34 member companies for use in air-conditioning and refrigeration training programs. Over 160 visual training aids are listed, arranged under the following categories: (1) booklets, catalogues, and manuals, (2) technical articles and bulletins, (3) charts and tables, (4) reference guides, (5) films, (6) strip film sets, (7) slide sets, and (8) teaching models and trainers. Eighteen audiovisual aids listed include strip film and record/cassette sets, slide record sets, and sound motion films. A field service training-mobile laboratory, two guest lecturer programs, and a listing of service training materials for transport refrigeration mechanics are also given. Listings provide an identification code, title of the item, brief description, appropriate educational level, price, availability source, and additional information necessary for ordering the material. (AW)

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AIR-CONDITIONING AND REFRIGERATION INSTITUTE • ARI

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BIBLIOGRAPHY OF TRAINING AIDS

2ND EDITION
SEPTEMBER
1970

T012609

COMPILED BY: AIR CONDITIONING AND REFRIGERATION INSTITUTE • 1815 NORTH FORT MYER DRIVE • ARLINGTON, VIRGINIA 22209

ED047154

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FOREWORD

The Air-Conditioning and Refrigeration Institute compiled and published this Bibliography of Training Aids, (training materials; films; and ancillary visual aids) available from member-companies, as an industry service to school officials interested in air-conditioning and refrigeration courses.

Projected to serve several educational levels, the Training Aids are individually designated appropriate for secondary and/or post secondary school courses.

Persons interested in obtaining the listed Training Aids should communicate directly with the respective companies.

Charles J. McKeone
Director of Manpower Development
Air-Conditioning & Refrigeration
Institute

MEMBERS, ARI MANPOWER DEVELOPMENT COMMITTEE

Chairman: Lee A. Miles

Vice-Chairman: Louis L. Patalita

O.A. Fitch
BRYANT AIR CONDITIONING CO.
Indianapolis, Indiana 46207

Louis Patalita
CARRIER AIR CONDITIONING COMPANY
Syracuse, New York 13201

L. A. Miles
CLIMATROL INDUSTRIES, INC.
Milwaukee, Wisconsin 53201

James B. Gray
E. I. du PONT de NEMOURS
& COMPANY, INC.
Wilmington, Delaware 19898

Henry A. Michalski
IWI DIVISION
ESSEX WIRE CORPORATION
Fort Wayne, Indiana 46804

Stewart Segerstrom
LENNOX INDUSTRIES INC.
Columbus, Ohio 43216

Howard Blair
WESTINGHOUSE ELECTRIC CORP.
AIR CONDITIONING DIVISIONS
Staunton, Virginia 24401

Harvey P. Painter
YORK DIVISION, BORG-WARNER CORP.
York, Pennsylvania 17405

* G. E. Buchanan
YORK DIVISION, BORG-WARNER CORP.
York, Pennsylvania 17405

Carl E. Cannon
WESTINGHOUSE ELECTRIC CORP.
AIR CONDITIONING DIVISIONS
Staunton, Virginia 24401

* Alternates

ACKNOWLEDGEMENT

The Air-Conditioning and Refrigeration Institute gratefully acknowledges the cooperation of the following member-companies for making their training materials available to educational institutions:

Airtemp Division, Chrysler Corporation

Alco Controls Division, Emerson Electric Company

American Air Filter Company, Inc.

American Standard Inc., Residential Air Conditioning Division

American Standard, Inc., Wilmington Coil Division

Bally Case and Cooler, Inc.

Baltimore Aircoil Company, Inc.

Bell & Gossett

Bryant Air Conditioning Company

Calgon Corporation

Cambridge Filter Corporation

Carrier Air Conditioning Company

Century Engineering Corporation

Climatrol Industries, Inc.

Copeland Refrigeration Corporation

Day & Night Manufacturing Company

Dunham - Bush, Inc.

du Pont de Nemours and Company, Incorporated,
E.I., "Freon" Products Division

Heat Exchangers, Inc., Koldwave Division

HERRmidifier Company, Inc.

Honeywell, Inc.

Imperial Eastman Corporation

Jarrow Products, Inc.

Lennox Industries, Inc.

McQuay Incorporated

Payne Company, The

Ranco

Sporlan Valve Company

Thermo King Corporation

Trane Company, The

Tyler Refrigeration Division, Clark Equipment Company

Westinghouse Electric Corporation, Central Residential Air Conditioning Division

Whirlpool Corporation

White - Rodgers Division, Emerson Electric Company

BOOKLETS
CATALOGUES
AND
MANUALS

Identification Code: 820918 - Training Booklet

Title: "ICE MAGIC REVIEW" BOOKLET

Description: This booklet is a training course on the repair of the automatic six cavity domestic ice maker.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.10 each; Film: $1.50.

Additional information: 35 mm color film Identification Code 820917, "ICE MAGIC REVIEW".

Film takes from 1 to 3 hours depending on the group leader, group, and materials being used along with the film.

####

Identification Code: 820941 - Training Booklet

Title: FUNDAMENTALS OF DEHYDRATING A REFRIGERANT SYSTEM

Description: Booklet explains and demonstrates the need for efficient evacuation of sealed refrigeration system.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: $.10 each.

####

Identification Code: 821171 - Training Booklet

Title: 1965 COMPACT AUTOMATIC ICE MAKERS

Description: This booklet is a training course on the repair of the automatic eight cavity domestic ice maker.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: $.10 each; Film: $1.50

Additional information: 35 mm color film Identification Code 821170, "1965 COMPACT AUTOMATIC ICE MAKER".

Film takes from 1 to 3 hours depending on the group leader, group, and materials being used along with the film.

####

Identification Code: 821230 - Training Booklet

Title: BASIC ELECTRICAL REFRIGERATION CONTROLS

Description: This booklet provides instruction pertaining to the electrical components of refrigeration systems.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: $.10 each; Film: $1.50

Additional information: 35 mm color film Identification Code 821229, "BASIC ELECTRICAL REFRIGERATION CONTROLS".

Film takes anywhere from 1 to 3 hours depending on group and also leader, and materials being used with the film.

####

Identification Code: 821231 - Training Booklet

Title: 1965 REFRIGERATION PRODUCTS

Description: A course presenting feature changes of the 1965 line of refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.10 each; Film: $1.50.

Additional information: 35 mm color film strip Identification Code 821232, "1965 REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending on the group leader, group, and materials being used along with the film.

####

Identification Code: 821234 - Training Booklet

Title: 45 POUND ICE CUBE MAKER BOOKLET

Description: This booklet is a training program for a domestic free standing ice cube maker.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.10 each; Film: $1.50.

Additional information: 35 mm color film strip Identification Code 821233 - "45 POUND ICE CUBE MAKER".

Film takes from 1 to 3 hours depending upon the group leader, group, and the materials being used along with the film.

####

Identification Code: 821296 - Training Booklet

Title: ROOM AIR CONDITIONER LOAD CALCULATION

Description: This booklet explains the heat loads impressed on room air conditioners; and furthermore, how the heat loads are often miscalculated and recommends the proper remedial methods.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: $.10 each

####

Identification Code: 821444 - Training Booklet

Title: 1966 REFRIGERATION PRODUCTS

Description: A course presenting feature changes of the 1966 line of refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, La Porte, Indiana 46350

Terms: Booklet: $.10 each; Film: $1.50

Additional information: 35 mm color film strip Identification Code 821443 "1966 REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending on the meeting group leader, group, and the materials being used with the film.

####

Identification Code: 821601 - Training Booklet

Title: COMMERCIAL ICE MAKERS BOOKLET

Description: This booklet instructs students on the repair of Whirlpool commercial automatic Ice Cube Makers.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50

Additional information: 35 mm color film strip Identification Code 821602, "COMMERCIAL ICE MAKERS".

This film takes from 1 to 3 hours depending upon the group leader, group, and the materials being used along with the film.

####

Identification Code: 821603 - Training Booklet

Title: SERVICING CENTRAL ELECTRIC AIR CONDITIONERS

Description: This booklet is a program on training for the Whirlpool Central Electric Air Conditioners.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 821604, and cassette tape Identification Code 828633, "SERVICING CENTRAL AIR CONDITIONERS".

Film takes from 1 to 3 hours depending on group leader, group, and the materials being used along with the film.

####

Identification Code: 821681 - Training Booklet

Title: 1967 REFRIGERATION PRODUCTS

Description: A course presenting feature changes of the 1967 line of refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.15 each, Film: $1.50

Additional information: 35 mm color film strip Identification Code 821682, "1967 REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending on the meeting leader, group, and the materials being used along with the film.

####

Identification Code: 821893 - Training Booklet

Title: R-MODEL ABSORPTION AIR CONDITIONING BOOKLET

Description: This booklet is a training program on the current models of the gas absorption central air conditioning systems.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 821894, and cassette tape, Identifiaction Code 828631, "R-MODEL ABSORPTION AIR CONDITIONING".

This film takes from 1 to 3 hours depending on the group leader, group, and the materials being used along with the film.

####

Identification Code: 828106 - Training Booklet

Title: "S" MODEL REFRIGERATION PRODUCTS

Description: The 1968 Whirlpool product line is presented and discussed.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50

Additional information: 35 mm color film strip Identification Code 828105, "'S' MODEL REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828416 - Training Booklet

Title: THE COMMERCIAL ICE FLAKER

Description: The operation, construction, and service of the Whirlpool ice flaker line is explained.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828417, and cassette tape Identification Code 828462, "THE COMMERCIAL ICE FLAKER".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828439 - Training Booklet

Title: USE AND CARE OF TEST INSTRUMENTS

Description: This booklet shows how to read and use test instruments.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828440, and cassette tape Identifiaction Code 828459, "USE AND CARE OF TEST INSTRUMENTS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828573 - Training Booklet

Title: WHIRLPOOL PRESENTS "T" SERIES REFRIGERATION PRODUCTS

Description: This book and film cover the construction and servicing of Whirlpool 1969 products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828574, and cassette tape Identification Code 828575, "WHIRLPOOL PRESENTS 'T' SERIES REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828637 - Training Booklet

Title: CENTRAL AIR CONDITIONING SYSTEM EVALUATION

Description: Basic program covering residential type system problems -- is not related to product problems. This program is based on the use of compression type equipment.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828638, and cassette tape Identification Code 828639, "CENTRAL AIR CONDITIONING SYSTEM EVALUATION".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828737 - Training Booklet

Title: 1200 POUND ICE CUBER

Description: A booklet, film, and cassette tape for training in the construction, servicing, and installation of the 1200 pound commercial ice cuber.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828738, and cassette tape Identification Code 828739, "1200 POUND ICE CUBER".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828751 - Training Booklet

Title: "T" MODEL GAS ABSORPTION AIR CONDITIONERS

Description: Supersedes Identification Codes 821336, 821592 and 821893. Improved product design and performance.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50, Wall Chart: $2.50

Additional information: 35 mm color film strip Identification Code 828749, and cassette tape Identification Code 828750, wall chart Identification Code 828746, "'T' MODEL GAS ABSORPTION AIR CONDITIONERS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film

####

Identification Code: 828792 - Training Booklet

Title: GAS CENTRAL AIR CONDITIONING SYSTEM EVALUATION

Description: A basic program covering residential type system problems. This program is not related to product problems. It is based on the use of absorption water chiller equipment.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828791, and cassette tape Identification Code 828793, "GAS CENTRAL AIR CONDITIONING SYSTEM EVALUATION".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828978 - Training Booklet

Title: "V" MODEL REFRIGERATION

Description: Service information concerning the 1970 Whirlpool refrigeration product line -- refrigerators, freezers, and air conditioners.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.25 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 828981, and cassette tape Identification Code 828982, "'V' MODEL REFRIGERATION".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 828983 - Training Booklet

Title: REFRIGERATION FUNDAMENTALS

Description: This booklet provides training information for understanding of the function of the refrigeration system.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.30 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identifiaction Code 828984, and cassette tape Identification Code 828985, "REFRIGERATION FUNDAMENTALS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829003 - Training Booklet

Title: BRAZING - HOW AND WHY

Description: Designed to teach the student what equipment, safety rules, and procedures are recommended for sealed system brazing on domestic refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.20 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829004, and cassette tape Identification Code 829005, "BRAZING - HOW AND WHY".

Film takes from 3/4 to 1 1/2 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829007 - Training Booklet

Title: REPAIR PROCEDURES FOR REFRIGERATION SEALED SYSTEMS

Description: A step by step procedure for repairing a sealed refrigeration system. It covers wet, dry, and burned out systems. It uses the mercury manometer to determine proper evacuation.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.30, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829008, and cassette tape Idendification Code 829009, "REPAIR PROCEDURES FOR REFRIGERATION SEALED SYSTEMS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829179 - Training Booklet

Title: THE PROFESSIONAL APPROACH

Description: This booklet, film, and cassette tape give suggestions on ways to handle certain situations which occur between the service technician and the customer.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.30, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829181, and cassette tape Identification Code 829180, "THE PROFESSIONAL APPROACH".

Film takes approximately 1/2 hour depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829248 - Training Booklet

Title: HOW TO READ WHIRLPOOL HOME APPLIANCE WIRING DIAGRAMS

Description: This booklet teaches the student how to read the wiring symbols and wiring diagrams used on Whirlpool home appliances.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: $.35 each

Additional information: This is a programmed instruction booklet and will take from 3 to 6 hours for the student to complete. All symbols and diagrams follow guidelines created by the American National Standards Institute (A.N.S.I.).

####

Identification Code: 829249 - Training Booklet

Title: SERVICING CENTRAL ELECTRIC AIR CONDITIONERS

Description: A review of the latest (1970) equipment. Its controls, wiring, and features are well presented.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.30 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829250, and cassette tape Identification Code 829251, "SERVICING CENTRAL ELECTRIC AIR CONDITIONERS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829276 - Training Booklet

Title: 50 POUND ICE CUBER AND COMMERCIAL ICE MAKER TRAINING

Description: A training program on all Whirlpool commercial ice makers from the 45 pound to the 600 pound models. Discusses construction, service, and installation.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.35 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829272, and cassette tape Identification Code 829273, cover the 50 pound ice cuber. 35 mm color film strip, Identification Code 829274, and cassette tape Identification Code 829275, cover commercial ice maker training. NOTE: the 50 pound ice cuber program should be presented as an introduction to the commercial ice maker training program.

Films take from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

Identification Code: 829279 - Training Booklet

Title: "W" MODEL REFRIGERATION PRODUCTS

Description: A course presenting feature changes of the 1971 line of refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street, LaPorte, Indiana 46350

Terms: Booklet: $.25 each, Film: $1.50, Cassette Tape: $2.50

Additional information: 35 mm color film strip Identification Code 829277, and cassette tape Identification Code 829278, "'W' MODEL REFRIGERATION PRODUCTS".

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 357 RACD

Title: GET THE COMPETITIVE EDGE

Description: A 36-page booklet explaining the total comfort system designed to assist the salesman in figuring, designing and selling environmental control as applied to the home.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: Free -- in limited quantities.

####

Identification Code: 389 RACD

Title: TROUBLE-TRACER -- ELECTRIC FURNACES

Description: The purpose of this item is to enable servicemen to quickly and accurately diagnose malfunctions of electric furnaces.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: $.25 each

Additional information: Printed on Tensalex paper which is very durable and washable.

####

Identification Code: 446-ACD

Title: TROUBLE-TRACER -- GAS-FIRED FURNACES

Description: The purpose of this 4-page booklet is to enable servicemen to quickly and accurately diagnose malfunctions of gas-fired furnaces.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: $.25 each, in lots of 25 or more to one address for ARI sponsored training.

Additional information: Printed on Tensalex paper, which is very durable and washable.

####

Identification Code: 519-ACD

Title: TROUBLE-TRACER -- OIL-FIRED FURNACES

Description: The purpose of this 4-page booklet is to enable servicemen to quickly and accurately diagnose malfunctions of oil-fired furnaces.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: $.25 each, in lots of 25 or more to one address for ARI sponsored training.

####

Identification Code: 831-ACD

Title: TROUBLE-TRACER -- SUMMER AIR CONDITIONING AND HEAT PUMPS

Description: The purpose of this 8-page booklet is to enable servicemen to quickly and accurately diagnose malfunctions of summer air conditioning and heat pumps.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: $.50 each, in lots of 25 or more to one address for ARI sponsored training.

Additional information: Printed on Tensalex paper, which is very durable and washable.

####

Identification Code: AC-800 (6-64)

Title: SUMMER AIR CONDITIONING AND HEAT PUMP -- GENERAL INFORMATION AND SERVICE GUIDE

Description: The purpose of this 52-page booklet is to present some of the fundamental aspects of summer air conditioning and heat pumps with respect to residential and small commercial installations.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc., Residential Air Conditioning Division
206 Woodford Avenue, Elyria, Ohio 44035

Terms: $.50 each, in lots of 25 or more to one address for ARI sponsored training.

####

Identification Code: R-2060

Title: AN INTRODUCTION TO BASIC ELECTRICITY

Description: Explains basic electrical functions used in control circuits.

Appropriate for: High School Course; Two-Year College Course

Source: White-Rodgers Training Division
9797 Reavis Road, St. Louis, Missouri 63123

Terms: No Charge

####

Identification Code: R-2078

Title: AN INTRODUCTION TO BASIC SOLID STATE THEORY

Description: Explains basic theory of solid state devices and shows how an SCR operates.

Appropriate for: High School Course; Two-Year College Course

Source: White-Rodgers Training Division
9797 Reavis Road, St. Louis, Missouri 63123

Terms: No Charge

####

Identification Code: R-3009

Title: MOBILE HOME APPLICATION GUIDE FOR GUN TYPE OIL BURNERS

Description: Explains common trouble problems with gun type oil burners and gives complete check-out procedure for cod cell type controls.

Appropriate for: High School Course; Two-Year College Course

Source: White-Rodgers Training Division
9797 Reavis Road, St. Louis, Missouri 63123

Terms: No Charge

####

Identification Code: R-3043

Title: THERMOSTATS FOR RESIDENTIAL HEATING AND COOLING

Description: Explains principle of operation of bimetal thermostats, heat anticipation and switching functions of various types of residential type thermostats.

Appropriate for: High School Course; Two-Year College Course

Source: White-Rodgers Training Division
9797 Reavis Road, St. Louis, Missouri 63123

Terms: No Charge

####

Identification Code: 70-4715

Title: CONTACTOR GUIDE

Description: Describes various applications for definite purpose contactors, particularly in refrigeration and air conditioning. Information to help in selecting the right definite purpose contactor for each specific application.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantities.

####

Identification Code: 70-4719

Title: TEMPERATURE CONTROLS

Description: Discusses the design and operation of various controllers including applications and specifications.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantities

####

Identification Code: 70-4720

Title: FAN SPEED CONTROL

Description: Outlines head pressure problems and fundamentals of modulating fan speed controls.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: 70-4721

Title: FAN CENTERS AND RELAYS

Description: Fan relay and fan center specifications and applications.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: 70-4724

Title: REFRIGERATION AND AIR CONDITIONING CONTROL SYSTEMS

Description: Basic control panels and components used in refrigeration and air conditioning systems.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: 71-6735

Title: PACKAGE MULTIZONE AND MAKE-UP AIR PRIMER

Description: Operational fundamentals of electric control systems for package multizone units and make-up air equipment. Wherever possible, typical systems are portrayed to provide the necessary understanding of control requirements.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: 77-1014

Title: ELECTRIC CONTROL CIRCUITS

Description: Defines electric control circuits and explains how they are classified including schematics for each class of control circuits.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: Part No. AE-101

Title: FUNDAMENTALS OF REFRIGERATION

Description: Basic introduction to refrigeration theory and practice.

Appropriate for: Two-Year College

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: Part No. AE-102

Title: REFRIGERATION SYSTEM COMPONENTS

Description: Basic description of refrigeration system components and their application in refrigeration applications.

Appropriate for: Two-Year College Course

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: Part No. AE-103

Title: THE REFRIGERATION LOAD

Description: Basic fundamentals of heat transfer and refrigeration load calculation.

Appropriate for: Two-Year College Course

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: Part No. AE-104

Title: SYSTEM DESIGN

Description: Fundamentals of system design and recommended application engineering practice.

Appropriate for: Two-Year College Course

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: Part No. AE-105

Title: INSTALLATION AND SERVICE

Description: Fundamentals of service operations and guide to good installation procedures.

Appropriate for: Two-Year College Course

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: Part No. AE-6400

Title: COPELAND ELECTRICAL HANDBOOK

Description: Basic electrical wiring information for Copeland motor-compressors.

Appropriate for: Two-Year College Course

Source: Copeland Refrigeration Corporation
Sidney, Ohio 45365

Terms: Free on request for small quantities. Nominal charge for large quantities.

####

Identification Code: None

Title: THE AIR AROUND US

Description: A 15 page booklet briefly describing the uses, application and evaluation of commercial air filters.

Appropriate for: High School Course; Two-Year College Course

Source: Cambridge Filter Corporation
P.O. Box #1255, Syracuse, New York 13201

Terms: $.50 each

####

Identification Code: Form 48

Title: THERMOSTATIC EXPANSION VALVES: INSTALLATION - FIELD SERVICE - ASSEMBLY

Description: This booklet deals with the importance of correct valve installation. It also covers field servicing of expansion valves and lists a number of common causes of valve malfunction and how to identify them.

Appropriate for: High School Course; Two-Year College Course

Source: Sporlan Valve Company, Education and Training Department
7525 Sussex Avenue, St. Louis, Missouri 63143

Terms: Without Charge

####

Identification Code: Form 56

Title: THERMOSTATIC EXPANSION VALVES: THEORY OF OPERATION - APPLICATION - SELECTION

Description: This booklet covers the operating principles of a thermostatic expansion valve and includes such subjects as superheat, fundamental pressures, capacities, selective thermostatic charges, etc. It also deals with valve selection and application.

Appropriate for: High School Course; Two-Year College Course

Source: Sporlan Valve Company, Education and Training Department
7525 Sussex Avenue, St. Louis, Missouri 63143

Terms: Without Charge

####

Identification Code: 6575B3

Title: CENTRAL STATION HEAT PUMP BASIC CIRCUITRY

Description: Brief explanation of the basic operation cycle of a liquid force feed reverse cycle system.

Appropriate for: High School Course

Source: Climatrol Industries Inc.
Box 401, Milwaukee, Wisconsin 53201

Terms: Free on request in single lot. Nominal charge for large quantities.

####

Identification Code: See additional information below.

Title: RESIDENTIAL HUMIDIFICATION SUBJECTS.

Description: See below.

Appropriate for: High School Course; Two-Year College Course

Source: HERRmidifier Company, Inc., P.O.Box 1747 (Zip code 17604)
1810 Hempstead Road, Lancaster, Pennsylvania 17601

Terms: On request. Advise quantities desired.

Additional information:

70-1	Bulletin	"UNDERSTANDING HUMIDITY" - covers definitions, importance of proper levels, selecting equipment, etc.
HF-2	Booklet	"HUMIDITY" - how it affects personal comfort and heating costs in a home.
69-28	Bulletin	"FACTUAL INFORMATION ABOUT MINERALS IN WATER AND HUMIDIFIERS" - covers proper consideration of water hardness in selecting equipment.
707	Service Manual	General and specific information for servicing centrifugal atomizing humidifiers.
490	Service Manual	General and specific information for servicing evaporative type humidifiers.

####

Identification Code: AT-1

Title: PRINCIPLES OF AIR CONDITIONING

Description: Booklet introducing student to principles of air conditioning.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-2

Title: HEAT ENERGY IN REFRIGERATION

Description: Booklet describing flow of heat energy

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-3

Title: AIR AND REFRIGERANT CYCLES

Description: Booklet introduces basics of refrigeration cycle

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-4

Title: FACTORS OF HEAT FLOW

Description: Booklet describing heat load characteristics in residential air conditioning.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-5

Title: LOAD ESTIMATING

Description: Booklet reviewing use of Westinghouse Residential Load Estimating form and procedure.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-6

Title: ROOM AIR DISTRIBUTION

Description: Booklet presenting selection and application of residential room air distribution ducts and outlets.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: AT-7

Title: DUCT SYSTEMS AND DESIGN

Description: Booklet on design and application of residential duct systems.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: SVT-BR1 (Service Training)

Title: BASIC REFRIGERATION

Description: Booklet on principles of refrigeration and heat flow.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: SVT-BR2 (Service Training)

Title: THE COMPRESSOR

Description: Booklet reviewing function and types of refrigeration compressors.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: SVT-BR3 (Service Training)

Title: CONDENSERS AND EVAPORATORS

Description: Booklet describing types and operation of typical condensers and evaporators.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: SVT-BR4 (Service Training)

Title: REFRIGERANT FLOW CONTROL DEVICES

Description: Booklet reviewing flow controls, operation and adjustment.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: SVT-BR5 (Service Training)

Title: THE SYSTEM AND THE REFRIGERANT

Description: Booklet describing the operation characteristics of a typical refrigeration system.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510
Staunton, Virginia 24401

Terms: $.40 each

####

Identification Code: Part No. 71-6736

Title: INTRODUCTION OF AIR CONDITIONING

Description: (16 pages) Reviews the purpose, use and major factors to be considered in air conditioning. Discusses basic types of systems for commercial and industrial applications.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell Branch Office - Residential Division

Terms: Free - offered in limited and reasonable quantities.

####

Identification Code: Part No. 70-4704

Title: 70-4704 - RESIDENTIAL AIR CONDITIONING CONTROL (REFERENCE BOOK)

Description: Function of year around air conditioning, cooling equipment, refrigeration equipment, applications, control requirements and reference data.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell Branch - Residential Division

Terms: Free - offered in limited and reasonable quantity.

####

Identification Code: None

Title: PHYSICS OF AIR

Description: A 52-page booklet explaining in technical form all about air and its properties. The booklet is printed in textbook format and is a valuable teaching aid to anyone connected with the movement or conditioning of air.

Appropriate for: High School Course; Two-Year College Course

Source: American Air Filter Company, Inc.
215 Central Avenue
Louisville, Kentucky 40208

Terms: $2.00 per copy.

####

Identification Code: C-307

Title: GENERAL CATALOG

Description: A listing of all available Jarrow Products door gaskets for refrigerator and freezer doors, both commercial and domestic.

Appropriate for: High School Course

Source: Jarrow Products, Inc.
2000 North Southport Avenue
Chicago, Illinois 60614

Terms: C-307 Catalog is available free in limited quantities for school reference libraries.

####

Identification Code: None

Title: REFRIGERATION EVAPORATORS CONDENSED CATALOG

Description: Ten page booklet on unit coolers for reach-ins and walk-in units. General information is given on each unit plus a table of performance data.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Wilmington Cold Division
602 Sunnyvale Drive
Wilmington, North Carolina 28401

Terms: Write for details

####

Identification Code: 2065

Title: GENERAL CATALOG

Description: A listing of all available Ranco Controls with photos, descriptions and specifications.

Appropriate for: High School Course; Two-Year College Course

Source: Ranco
601 West Fifth Avenue
Columbus, Ohio 43201

Terms: (See additional information.)

Additional information: The 2065 catalog is not intended for large distribution. As many as six copies will be distributed, per school, for reference library use, at no cost.

####

Identification Code: TY-ME-32

Title: COMMERCIAL FOOD REFRIGERATION AND DISPLAY FIXTURES FOR RETAIL STORES, HOTELS, RESTAURANTS AND INSTITUTIONS

Description: A listing and description of the various types available and the mechanical considerations.

Appropriate for: High School Course; Two-Year College Course

Source: Tyler Refrigeration Division, Clark Equipment Co.
c/o Ray L. Greene - Director - Food Industry Development
1329 Lake Street
Niles, Michigan 49120

Terms: Free -- in limited and reasonable quantity

####

Identification Code: 12-69

Title: SECTIONAL PREFAB WALK-IN COOLERS AND FREEZERS/
REFRIGERATED WAREHOUSES

Description: 32-page brochure on Walk-In Coolers and Freezers and Refrigerated Warehouses, including general design and construction information, illustrations, dimensional and capacity charts, refrigeration recommendations, etc.

Appropriate for: High School Course; Two-Year College Course

Source: Bally Case and Cooler, Inc.
Bally, Pennsylvania 19503

Terms: Free

####

Identification Code: None

Title: MISCELLANEOUS MANUALS (see below).

Description: (See below).

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
200 South Twelfth Avenue
Marshalltown, Iowa 50158

Terms: On request.

The following printed manuals are available:

1. "Planning for Profit" includes a set of four books covering basic information: Analysis of a balance sheet, Collections, and a suggested accounting system. All are designed for a heating and air conditioning contractor as an aid in the operation of his business.

2. Psychrometric Manual covers the principles of psychrometrics and an introduction to a psychrometric chart. Some fundamental problems are presented and worked out, giving a guide to many different types of problems which can be solved.

3. Coil Selection Manual. This manual presents the basic curves used in selecting evaporator coils and matching condensing units and illustrates and describes how coils and condensing units are combined to meet a given set of conditions.

4. Load Calculating Manual. This manual gives all of the load calculating factors for both residential and commercial heat gain and loss calculations. There is no direction as to how to use these figures in this manual. Price $5.00.

5. Residential Load Calculating Manual. This manual details all of the factors used in calculating a residential heat gain and loss. It goes through, step by step, each building component considered and how it is handled with regard to the total load in the house. Sample plans and forms are included in the manual so that it becomes a complete step by step program to calculate heat gain and loss for residential applications. The price on this manual is $5.00.

6. Commercial Load Calculating Manual. This manual goes through a step by step heat gain and loss calculation for a commercial application. Plans and forms are included with the manual to allow the complete heat gain and loss calculation in a commercial establishment, including make-up air and other special factors. The price of this manual is $5.00.

7. Make-up Air Manual. This manual describes the conditions and considerations for the application of make-up air equipment to various types of buildings. It contains tables showing make-up air requirements for many different applications.

8. Lennox Cooling Service Manual. This is a loose-leaf manual on basic refrigeration service and not specifically restricted to Lennox equipment. The manual is divided into several sections including fundamentals, installation procedures, mechanical components, electrical components, and a general section. The manual sells for $10.00 and is available through all Lennox Divisions.

9. History of Hermetic Compressors. This is a guide to the development of hermetic compressors from the early ones used in household appliances, up to the present larger size compressors. It includes the development and reasons for a two-pole motor, PSC motor, and many of the other recent developments leading to today's modern refrigeration compressor.

####

Identification Code: Manual 3100

Title: "CENTRIFUGAL PUMP SELECTION AND APPLICATION"

Description: How to select pumps using the system curve - both closed and open systems.

Appropriate for: Two-Year College Course

Source: ITT Bell and Gossett
8200 North Austin Avenue
Morton Grove, Illinois 60053

Terms: No Charge

####

Identification Code: TEH-1166

Title: "PRINCIPLES OF CENTRIFUGAL PUMP CONSTRUCTION AND MAINTENANCE"

Description: Construction of different types of pump and how they operate.

Appropriate for: Two-Year College Course

Source: ITT Bell and Gossett
8200 North Austin Avenue
Morton Grove, Illinois 60053

Terms: No charge

####

Identification Code: TE-PD-162 Rev. 1

Title: "PUMP DATA BOOK"

Description: Information on pumps for all types of fluids, construction, seals, formulas.

Appropriate for: Two-Year College Course

Source: ITT Bell and Gossett
8200 North Austin Avenue
Morton Grove, Illinois 60053

Terms: No charge

####

Identification Code: 1058

Title: RANCO SERVICE MANUAL

Description: Manual containing condensed product data and service instructions on the following:

Refrigeration controls	Health code safety controls
Air conditioning controls	Reversing valves
Clothes dryer controls	Starting relays
Humidity controls	Rotary switches

Appropriate for: High School Course; Two-Year College Course

Source: Ranco
601 West Fifth Avenue
Columbus, Ohio 43201

Terms: See below.

Additional information: The 1058 Service Manual is not intended for large distribution. As many as six copies will be distributed, per school, for reference library use, at no cost.

####

Identification Code: McQuay Engineering Manual No. 95-A

Title: ENGINEERING MANUAL - REFRIGERATION AND COMFORT COOLING

Description: This edition of the McQuay Sales Engineering Manual covering Commercial Refrigeration and Comfort Air Conditioning has been prepared in the form of a condensed text and reference book. The theory and principles of modern refrigerations and air conditioning have been omitted due to the many excellent publications currently available on these subjects.

The purpose of this reference book is to furnish the engineering, selling and servicing organizations with accurate and useful data to simplify load calculations and equipment selections. The manual contains 49 tables of reference data commonly required in load calculations and/or equipment selection. No attempt has been made to specify a particular make of equipment.

Appropriate for: High School Course; Two-Year College Course

Source: McQuay, Inc. (Mr. G. Cook, Mgr., Adv. and Sales Promotion)
P.O. Box 1551, 13600 Industrial Park Boulevard
Minneapolis, Minnesota 55440

Terms: Net 30 days.

Additional information:

McQuay Engineering Manual	$.25 per copy.
McQuay Refrigeration Load Form #65R	.10 per pad/10 sheets
McQuay Refrigeration Load Form #66R	.10 per pad/10 sheets
McQuay Refrigeration Load Form #67R	.10 per pad/10 sheets
McQuay Comfort Cooling Load Form #68R	.10 per pad/10 sheets

####

Identification Code: None

Title: HYDRONICS MANUAL

Description: A practical encyclopedic, 305 page, guide for heating and air conditioning. Valuable working tool for design engineers, consulting engineers, architects, contractors, students and technical libraries. Endorsed by leading engineering colleges throughout the country.

Appropriate for: High School Course; Two-Year College Course

Source: Dunham-Bush, Inc.
175 South Street
West Hartford, Connecticut 06110

Terms: Book: $10.00 each

Additional information: FOB destination

####

Identification Code: None

Title: BASIC AIR CONDITIONING MANUAL

Description: Basic introduction to Refrigeration and Electrical Control Theory

Appropriate for: High School Course

Source: Climatrol Industries, Inc.
Box 401
Milwaukee, Wisconsin 53201

Terms: Free in single lot, nominal charge for large quantities

####

Identification Code: None

Title: AIR CONDITIONING SCHOOL BOOK

Description: This manual is used in our factory and field schools to teach the basics of refrigeration. It also covers installation, wiring, service, etc. Included in each manual is a sample test covering most of the subject matter in the text.

Appropriate for: High School Course; Two-Year College Course

Source: Century Engineering Corporation
221 4th Avenue, S.E.
Cedar Rapids, Iowa 52401

Terms: $1.50 each, any quantity

####

Identification Code: None

Title: POCKET MANUAL ON HEATING

Description: A comprehensive heating systems application book covering commercial convectors, fin tube radiation, heating specialties, unit heaters, vacuum and condensate pumps and centrifugal pumps.

Appropriate for: High School Course; Two-Year College Course

Source: Dunham-Bush, Inc.
175 South Street
West Hartford, Connecticut 06110

Terms: Book: $2.50 each

Additional information: FOB destination

####

Identification Code: Bulletin 242

Title: COOLING TOWER ENGINEERING MANUAL

Description: A 19 page manual pertinent to the application and selection of centrifugal and tubeaxial, blow-thru counterflow cooling towers.
Detailed information, formulas and charts, covering theory and design, application, installation and maintenance is given in the manual.

Appropriate for: High School Course; Two-Year College Course

Source: Baltimore Aircoil Company, Inc.
Box 7322
Baltimore, Maryland 21227

Terms: No charge in reasonable quantities.

####

Identification Code: Bulletin 242

Title: EVAPORATIVE CONDENSER ENGINEERING MANUAL

Description: A 16 page manual pertinent to the application and selection of centrifugal and tubeaxial, blow-thru counterflow evaporative condensers.
Detailed information, formulas and charts, covering theory and design, selection and installation, refrigeration piping, and operation and maintenance is given in the manual.

Appropriate for: High School Course; Two-Year College Course

Source: Baltimore Aircoil Company, Inc.
Box 7322
Baltimore, Maryland 21227

Terms: No charge in reasonable quantities.

####

Identification Code: Bulletin 250

Title: THE NOISE OF COOLING TOWERS

Description: A 28 page engineering manual describing the procedures for evaluating the noise from cooling towers to determine if the noise will be acceptable to the neighbors who live or work nearby. The manual is also applicable to evaporative condensers and closed circuit industrial coolers.

Appropriate for: High School Course; Two-Year College Course

Source: Baltimore Aircoil Company, Inc.
Box 7322
Baltimore, Maryland 21227

Terms: No charge in reasonable quantities.

####

Identification Code: None

Title: TIME SHARING COMPUTER USE MANUAL

Description: Describes American Standard, Wilmington Coil Division system of computerized coil selection and performance verification.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Wilmington Coil Division
602 Sunnyvale Drive
Wilmington, North Carolina 21401

Terms: Write for details

####

Identification Code: None

Title: TRANE AIR CONDITIONING MANUAL

Description: Comprehensive 456 page manual on Air Conditioning theory and practice.

Appropriate for: Two-Year College Course

Source: Trane Co., Educational Division
3600 Pammel Creek Road
LaCrosse, Wisconsin 54601

Terms: $8.00 postpaid - U.S. Cash with order or COD

####

Identification Code: None

Title: TRANE RECIPROCATING REFRIGERATION MANUAL

Description: Practical Installation maintenance and servicing of Air Conditioning system Refrigeration Equipment

Appropriate for: Two-Year College Course

Source: Trane Co., Educational Division
3600 Pammel Creek Road
LaCrosse, Wisconsin 54601

Terms: $3.00 postpaid - U.S. Cash with order or COD

####

Identification Code: None

Title: TRANE SOLAR TABLE MANUAL

Description: 200 page paper bound data for estimating solar heat gains.

Appropriate for: Two-Year College Course

Source: Trane Co., Educational Division
3600 Pammel Creek Road
LaCrosse, Wisconsin 54601

Terms: $3.50 postpaid - U.S. Cash with order or COD

####

Identification Code: See below

Title: TRAINING MANUALS (SEE BELOW)

Description: See below

Appropriate for: High School Course; Two-Year College Course

Source: Engineering Services Department
The Payne Company or Day and Night Manufacturing Company
P.O. Box 1234, La Puente, California 91747
(or Local Distributor or Branch Office)

Terms: See below

FORM NO.	TITLE AND DESCRIPTION	PRICE*
HAE-I-A	"Fundamentals of Mechanical Comfort Cooling" Basic definitions and description of the refrigerant cycle and components.	$ .75
HAE-I-A(s)	"Fundamentals of the Heat Pump Cycle" Supplement to booklet above, describing heat pump cycle, components, etc.	.40
HAE-I-B	"Fundamentals of Gas-Fired Forced Air Heating" Basic gas heating systems and types of equipment.	.35
HAE -I-D	"Applied Electrical Theory" Reprint of several articles from Air Conditioning, Heating and Refrigeration News, covering basic electricity and circuits, power distribution, motors, transformers, etc.	.75
HAE-II-A	"Residential Cooling and Heating Load Estimating" Fundamentals of load estimation and instructions for using circular slide rule.	.35
ES-10	"Load Calculator" (Residential, circular slide rule)	1.50
HAC-10	"Load Estimate Forms" (Vellum, pad of 50)	1.00
HAE-II-B	"Commercial Heating and Cooling Load Calculation" Instructions for calculating loads for commercial structures, with tables, etc.	1.25
AC-1008	"Load Estimate Forms" (Commercial)	.03
HAE-III-A	"Air Distribution Systems" Basic terminology and recommended procedures for designing and constructing residential and commercial duct systems.	1.75

HAE-IV-B	"Gas-Electric Air Conditioner Application Manual" Descriptions of residential and commercial systems, utilizing single package gas heating and electric cooling units.	$ .75
HAE-V-A	"Forced Air Heating Application" Detailed application data for various types of forced air furnaces.	.75
HAE-VI-A	"Air Conditioning Service Guide" Recommended service procedures for conventional direct expansion refrigeration systems.	1.75
HAE-VI-A-S	"Heat Pump Service" Service procedures for heat pump cycle and controls.	.35
HAE-VI-B	"Methods for Determining CFM and Static Pressures" Analysis of air distribution systems by temperature rise or static pressure.	1.00
HAE-VII-A	"Forced Air Furnace Service" General Service instructions for gas-fired forced air furnaces.	.75

Note: * Prices shown are Net, f.o.b. factory.
(A 50% discount will be given to public schools, for material requested on their purchase order.)

####

Identification Code: KEISM - 69

Title: ENGINEERING, INSTALLATION AND SERVICE MANUAL FOR CENTRAL MODEL, WATER COOLED AIR CONDITIONERS AND HEAT PUMPS.

Description: Design of closed-loop heat pump systems, installation procedures for water-cooled, central air conditioners.

Appropriate for: Two-Year College Course

Source: Koldwave Division, Heat Exchangers, Inc.
8100 North Monticello Avenue
Skokie, Illinois 60076

Terms: Free in small quantities -- $.75 each in quantities above 5.

####

Identification Code: 829094

Title: REFRIGERATION TRAINING MANUALS

Description: This is a hard-bound book containing all the training programs on Whirlpool refrigeration products from 1966 to 1970.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
LaPorte, Indiana 46350

Terms: $3.50 each

####

TECHNICAL ARTICLES, AND BULLETINS

51 47

Identification Code: None

Title: SOLID DESICCANTS FOR REFRIGERATION DRIERS

Description: Collaboration of Dr. Walter O. Walker, A.A. Sakhnovsky, University of Florida, and Ralph B. Tilney, ALCO Controls Division-Emerson Electric Co. Extensive analysis of Solid Core Desiccants, their construction, water capacity testing, geometry of filtration characteristic and miscellaneous points of observation.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700
St. Louis, Mo. 63141

Terms: Without charge

####

Identification Code: None

Title: MOISTURE

Description: By Dr. Walter O. Walker, Dean, Division of Research and Industry, University of Miami. Problems encountered with the presence of moisture in refrigeration machines and solutions for correcting such.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700
St. Louis, Mo. 63141

Terms: Without charge

####

Identification Code: Technical Article 3-2002

Title: MAINTENANCE OF COOLING TOWERS

Description: Discusses the application of an effective water treatment and preventive maintenance program.

Appropriate for: High School Course; Two-Year College Course

Source: Calgon Corporation, Wholesaler Department
P.O. Box 1346
Pittsburgh, Pennsylvania 15230

Terms: Without charge

Identification Code: Technical Article 3-35

Title: TREATMENT OF WATER IN RECIRCULATING COOLING-WATER SYSTEMS

Description: Helps to understand and solve basic problems in water-cooling systems.

Appropriate for: High School Course; Two-Year College Course

Source: Calgon Corporation, Wholesaler Department
P.O. Box 1346
Pittsburgh, Pennsylvania 15230

Terms: Without charge

Additional information: 4 page reprint from RSC magazine.

###

Identification Code: Collation 1970 (1-24)

Title: TECHNICAL TRADE TALKS (SEE BELOW)

Description: An assembly of 24 articles discussing subjects of current concern in the mechanical planning and operation of Retail Food stores -- referring to both refrigeration equipment and air-conditioning. (See list of titles below)

Appropriate for: High School Course; Two-Year College Course

Source: Tyler Refrigeration Division
Clark Equipment Co., c/o Ray L. Greene
Director - Food Industry Development
1329 Lake Street
Niles, Michigan 49120

Terms: Free

Additional Information: Not intended for large distribution. Suggest no more than 6 copies per school for reference library use.

Feb. 61	TT 1	Cutting Room Calculating Guide
April 61	TT 2	Air Conditioning in Food Stores
May 61	TT 3	The Charging Port
June 61	TT 4	Air Conditioning in Food Stores (and its effect on the operation of Open Refrigerated Display Equipment)
July 61	TT 5	A Discussion of Motor Protection and Starters (re-motor-compressors)

Sept. 61	TT 6	Night Covers
Oct. 61	TT 7	Electric Defrost
Dec. 61	TT 8	Discussion on R 12 and R 22
Feb. 62	TT 9	More on Radiant Heat
May 62	TT 10	Refrigeration Line Sizing
Sept. 62	TT 11	Human Comfort and Radiant Heat
Dec. 62	TT 12	Two-Stage Compressors
Mar. 63	TT 13	Something New (Refrigerant 502)
Aug. 63	TT 14	Walk-In Coolers
Jan. 64	TT 15	Handling Fresh Beef in Food Stores
Jan. 65	TT 16	The Application and Selection of Combined Systems
Mar. 65	TT 17	Plastics - Miracle Materials
Aug. 65	TT 18	Warning Systems
Dec. 66	TT 19	Heat Recovery
Oct. 67	TT 20	Solid State Defrost Control
May 68	TT 21	Outdoor Condensing Units
May 69	TT 22	Supermarket Comfort
Sept. 69	TT 23	Talk About Defrost
May 70	TT 24	Customers, Supermarkets and Maintenance

####

Identification Code: Application Bulletin No. 106

Title: REMOVING SCALE FROM COOLING TOWER SYSTEMS

Description: Discusses scale deposits, several types of acid and acid cleaning methods.

Appropriate for: High School Course; Two- Year College Course

Source: Calgon Corporation, Wholesaler Department
P.O. Box 1346
Pittsburgh, Pennsylvania 15230

Terms: Without charge

####

Identification Code: None

Title: SPORLAN EDUCATIONAL LITERATURE PACKET

Description: The Sporlan Educational Literature Packet is a clear-cellophane envelope containing a variety of bulletins dealing with such subjects as thermostatic expansion valves, solenoid valves, acid in refrigeration and air-conditioning systems, cleanup after a hermetic motor burnout, etc. It also contains a copy of the Sporlan condensed catalog, and a pressure/temperature pocket card.

Appropriate for: Two-Year College Course

Source: Sporlan Valve Company
Advertising Department
7525 Sussex Avenue
St. Louis, Missouri 63143

Terms: Without Charge

####

Identification Code: IND-3 Bulletin

Title: COMMERCIAL AND INDUSTRIAL HUMIDIFICATION SYSTEMS

Description: Describes why humidity control is so important to many industries, which industries, recommended levels and factors affecting demand load and selection of proper equipment.

Appropriate for: High School Course; Two-Year College Course

Source: HERRmidifier Company, Inc.
P.O. Box 1747 (Zip 17604)
1810 Hempstead Road
Lancaster, Pennsylvania 17601

Terms: On request. Advise quantity desired.

####

Identification Code: See below

Title: REFRIGERANTS - TECHNICAL BULLETINS

Description:

B-2	Properties and Applications of the "Freon" Fluorocarbons
R-29	Refrigerant Numbering System
S-16	The "Freon" Compounds and Safety
RT-15	Fundamentals of Refrigerant Piping for Systems Using "Freon" 12 and "Freon" 22
RT-31	"Freon" 502 Refrigerant
RT-39	Characteristics of Refrigerants

Appropriate for: High School Course; Two-Year College Course

Source: E. I. du Pont de Nemours and Co., Inc.
"Freon" Products Division
14th Floor, Farmers Bank Building
Wilmington, Delaware 19898

Terms: No charge for literature ordered in reasonable quantities.

####

CHARTS

AND

TABLES

Identification Code: None

Title: REDI-PAK WALL CHARTS

Description: Each set of Redi-Pak Charts contains three 17" x 24" wall charts illustrating thermostatic expansion valves, solenoid valves, and Catch-All filter-driers plus a 35" x 45" pressure/temperature conversion wall chart.

Appropriate for: High School Course; Two-Year College Course

Source: Sporlan Valve Company, Advertising Dept.
7525 Sussex Avenue
St. Louis, Missouri 63143

Terms: Without Charge

####

Identification Code: None

Title: PRESSURE-TEMPERATURE WALL CHARTS

Description: Quick reference Wall Chart listing Pressure-Temperature data for various refrigerants.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700
St. Louis, Missouri 63141

Terms: Not available to individual students. Available without charge to class rooms only.

####

Identification Code: None

Title: PRODUCT WALL CHARTS

Description: Set of 4 17" x 22" Wall Charts showing sectional views of various types of Thermo Expansion valves, a piloted operated Solenoid valve, and an Evaporator Pressure Regulator.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700
St. Louis, Missouri 63141

Terms: Not available to individual students. Available without charge to class rooms only.

####

Identification Code: See Below

Title: REFRIGERANTS - CHARTS AND TABLES

Description: See Below

Appropriate for: High School Course; Two-Year College Course

Source: E. I. du Pont de Nemours and Co., Inc.
"Freon" Products Division
14th Floor, Farmers Bank Building
Wilmington, Delaware 19898

Terms: No charge for literature ordered in reasonable quantities.

Additional information:

Code No.	Description
B-26	Use of Tables and Charts of Thermodynamic Properties of the "Freon" Refrigerants
RT-40	Pressure-Enthalpy Charts and Their Use
C-1	Pressure-Enthalpy Diagrams for: "Freon" 11, "Freon" 12, "Freon" 22, "Freon" 113, "Freon" 114, and "Freon" 502
T-11	Thermodynamic Properties of "Freon" 11
T-12	Thermodynamic Properties of "Freon" 12
T-22	Thermodynamic Porperties of "Freon" 22
T-113A	Thermodynamic Properties of "Freon" 113
T-114D	Thermodynamic Properties of "Freon" 114
T-502	Thermodynamic Properties of "Freon" 502
A-62430	Plastic Pocket-Size Refrigerant Vapor Pressure Chart

####

Identification Code: 26.168A

Title: TRANE PSYCHROMETRIC CHARTS

Description: Charts for establishing system requirements and checking performances.

Appropriate for: High School Course; Two-Year College Course

Source: Trane Educational Division
3600 Pammel Creek Road
La Crosse, Wisconsin 54601

Terms: $.75 per pad of 25 charts, postpaid U.S. Cash with order or COD.

####

Identification Code: 828634

Title: CALCULATION FORMS

Description: These forms were designed for use of the service technician who needs to determine the load on a residential type system as compared with the capacity of the installed equipment.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $.50 (pad of 25)

####

Identification Code: None

Title: MEDIUM AND LOW TEMP LOAD CALCULATION FORMS (PADDED)

Description: Forms (each) encompass all factors relative to load calculation in logical clear and concise format.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Wilmington Coil Division
602 Sunnyvale Drive
Wilmington, North Carolina 28401

Terms: Write for details

####

Identification Code: Form 26.04

Title: LOAD ESTIMATE SHEETS

Description: Useful in calculating heating and cooling loads

Appropriate for: High School Course; Two-Year College Course

Source: Trane Educational Division
3600 Pammel Creek Road
La Crosse, Wisconsin 54601

Terms: $.50 per pad of 25 sheets, postpaid U.S. Cash with order or COD

####

REFERENCE

GUIDES

Identification Code: Form No. 1

Title: PRESSURE/TEMPERATURE POCKET CARD

Description: This pocket card lists the pressure/temperature conversion figures for the commonly used refrigerants

Appropriate for: High School Course; Two-Year College Course

Source: Sporlan Valve Company, Advertising Dept.
7525 Sussex Avenue
St. Louis, Missouri 63143

Terms: Without charge

####

Identification Code: 820622

Title: DIAL-A-FIX CARD "ELECTRIC REFRIGERATOR"

Description: This card is a trouble diagnosis chart for electric refrigeration products.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street
La Porte, Indiana 46350

Terms: $.15 each

####

Identification Code: 821295

Title: DIAL-A-FIX CARD "ROOM AIR CONDITIONER LOAD CALCULATION"

Description: This chart is a load calculation estimater.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation, Publications Department
229 Factory Street
La Porte, Indiana 46350

Terms: $.15 each

####

Identification Code: 828117

Title: DIAL-A-FIX CARD "ICE MAKER" (IN REFRIGERATOR)

Description: This card is a trouble diagnosis chart for refrigerator ice makers.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $.20 each

####

Identification Code: 828659

Title: AIR DUCT CALCULATOR

Description: This device may be used to size a duct system quickly, easily and accurately and is intended for use by a service technician in system analysis.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $.75 each

####

Identification Code: Form No. AC-709

Title: "DUCTOMATIC"

Description: Circular slide rule for sizing residential heating and/or cooling air handling trunks, ducts, risers, registers, diffusers, and grilles for new systems and checking existing systems.

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Inc.
Residential Air Conditioning Division
206 Woodford Avenue
Elyria, Ohio 44035

Terms: $.75 each in lots of 25 or more to one address for ARI sponsored training.

####

Identification Code: FS1002

Title: AIR CONDITIONING SERVICE GUIDE

Description: Handy pocket guide giving average pressures at several different ambient temperatures. Trouble shooting aids for most problems. Guide tells student what to check if unit does "such and such".

Appropriate for: High School Course; Two-Year College Course

Source: Century Engineering Corporation
221 4th Avenue, S.E.
Cedar Rapids, Iowa 52401

Terms: No charge to 100 pieces

####

Identification Code: None

Title: QUICK PICK HANDBOOK

Description: A 42 page booklet on unit cooler selection and application. A simplified guide for installing the right unit for the most effective results - functionally and economically. Much general information

Appropriate for: High School Course; Two-Year College Course

Source: American Standard, Wilmington Coil Division
602 Sunnyvale Drive
Wilmington, North Carolina 28401

Terms: Write for details

####

Identification Code: 13.01.10

Title: SOLENOID SERVICE HINTS

Description: Four page pamphlet covering useful Service Hints on Solenoid Valv

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Company
Marketing Services Department
Box 12700
St. Louis, Missouri 63141

Terms: Without charge

####

65

Identification Code: 12.01.10

Title: THERMO VALVE SERVICE HINTS

Description: Six page pamphlet covering useful Service Hints on Thermo Expansion Valves.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700
St. Louis, Missouri 63141

Terms: Without charge.

####

Identification Code: None

Title: PRESSURE-TEMPERATURE POCKET CARDS

Description: Handy Pocket Size temperature-pressure chart for Various Refrigerants.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division-Emerson Electric Co.
Marketing Services Department
Box 12700, St. Louis, Missouri 63141

Terms: Without charge.

####

Identification Code: None

Title: TRANE DUCTULATOR

Description: Calculator for signing ducts and checking air systems.

Appropriate for: High School Course; Two-Year College Course

Source: Trane Educational Division
3600 Pammel Creek Road
La Crosse, Wisconsin 54601

Terms: $1.00 postpaid U.S. Cash with order or COD.

####

FILMS

Identification Code: None

Title: FILM: "DON'T BUILD HAZARDS INTO YOUR TUBING SYSTEMS"

Description: Film is concerned with proper tubing practices. It's in color, 16 mm, 35 minutes duration.

Appropriate for: High School Course; Two-Year College Course

Source: Imperial-Eastman Corporation
6300 West Howard Street
Chicago, Illinois 60648

Terms: Offered on a LOAN FREE BASIS.

####

STRIP

FILM

SETS

Identification Code: None

Title: TRANE AIR CONDITIONING CLINIC

Description: Series of 14 booklets covering fundamentals to practical applications -- Separate film strips for each booklet.

Appropriate for: Two-Year College Course

Source: Trane Company - Educational Division
3600 Pammel Creek Road
La Crosse, Wisconsin 54601

Terms: Booklets $.70 each -- $9.80/set
35mm Filmstrips - $20.00/set. Sold only in sets.
Postpaid U.S. Cash with order or COD.

####

Identification Code: STE-70-1

Title: HEAT PUMP OPERATING COST COMPARISON

Description: Full color 35mm strip and companion presentation manual, which contains the same pictures as the film strips to aid in class discussion or for self instruction in Heat Pump Operating Cost Comparison with other fuels.

Running time: Variable, minimum - One (1) hour.

Appropriate for: Two-Year College Course

Source: Airtemp Division - Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film strip - $5.00 each, net - Manual $.75 each, net.

####

Identification Code: STM-31

Title: PRINCIPLES OF REFRIGERATION

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion, or for self-instruction in the "basics".

Running time: Variable depending on instructor (Minimum 1-1/2 hours).

Appropriate for: High School Course

Source: Airtemp Division-Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STM-32

Title: ELECTRICAL IN AIR CONDITIONING

Description: Full-Color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in the "basics", or for self-instruction in various Airtemp control panel arrangements.

Running Time: Minimum - Three (3) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division - Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

Additional information: This set covers basic wiring diagrams, tracing circuits and the use of electrical test instruments in checking capacitors, relays, motors, etc.

####

Identification Code: STM-33

Title: CHECK, TEST AND START PROCEDURES

Description: Full-Color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in the basic methods of checking out and insuring dependable performance of water-cooled and air-cooled air conditioning units.

Running Time: Variable, minimum - two (2) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STM-34

Title: AIR CONDITIONING TROUBLE DIAGNOSIS

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in the procedures for checking for installation and operating faults and faults that result from lack of maintenance.

Running Time: Variable, minimum - four (4) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

Additional information: Faults that originate in the refrigerant circuit, the evaporator air circuit, the condensing medium (air or water) circuit, and the electrical circuit (on both water-cooled and air-cooled equipment) are presented and discussed in relation to one another.

####

Identification Code: STM-35

Title: MOTOR-COMPRESSOR BURN-OUT, TESTING AND REPLACING

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same picture as the film strips to aid in class discussion or for self-instruction in hermetic system clean-up procedures following minor and severe motor-compressor burnouts.

Running Time: Variable, minimum - three (3) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STM-36

Title: ANALYZING, ADJUSTING AND SERVICE HEATING EQUIPMENT

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in checking out and insuring satisfactory operation of gas and oil-fired furnaces.

Running Time: Variable, minimum - three (3) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

Additional information: The evolution of forced warm air furnaces systems is also presented in this set.

####

Identification Code: STM-37

Title: HEAT PUMP SERVICE

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in the theory of operation and service of a typical air-to-air, split-system type heat pump.

Running Time: Variable, minimum - six (6) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Strip Film: $5.00 each, net. Manual: $.35 each, net.

Additional information: The cooling cycle, heating cycle, heating cycle with supplemental electrical heat and the defrost cycle are presented in a sequence of control operation.

####

Identification Code: STM-38, Part I

Title: ANALYZING, ADJUSTING AND SERVICING MODEL 3500 SERIES UNITS --- PART I

Description: Full-color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in the recognition of unit components and the heating and cooling sequence of operation.

Running Time: Variable, minimum - four (4) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film Strip: $5.00 each, net. Manual: $.35 each, net.

Additional information: Heating and cooling check, test and start procedures are also presented.

####

Identification Code: STM-38, Part II

Title: ANALYZING, ADJUSTING, AND SERVICING MODEL 3500 SERIES UNITS --- PART II

Description: Full color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in basic methods of servicing this type of equipment.

Running Time: Variable, minimum - three (3) hours.

Appropriate for: High School Course; Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film Strip: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STS-65-4

Title: THE ALL-ELECTRIC HEAT PUMP

Description: Full color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in understanding all-electric heat pump theory and operation and the advantages of electricity as a fuel.

Running Time: Variable, minimum - two (2) hours.

Appropriate for: Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film Strip: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STS-65-5, Part I

Title: DUCTED HEAT PUMP SYSTEMS

Description: Full color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in application and advantages of ducted electric heating and air conditioning.

Running Time: Variable, minimum - one (1) hour.

Appropriate for: Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film Strip: $5.00 each, net. Manual: $.35 each, net.

####

Identification Code: STS 65-5, Part II

Title: SIZING AND SELECTING MODERN HEAT PUMPS

Description: Full color 35 mm Strip Film and companion Presentation Manual which contains the same pictures as the film strips to aid in class discussion or for self-instruction in selecting the right equipment for the job.

Running Time: Variable, minimum - 1-1/2 hours.

Appropriate for: Two-Year College Course

Source: Airtemp Division, Chrysler Corporation
1600 Webster Street
Dayton, Ohio 45404

Terms: Film Strip: $5.00 each, net. Manual: $.35 each, net.

####

SLIDE

SETS

82/83

Identification Code: GTC-2

Title: "BE COMPRESSOR WISE"

Description: A slide set and booklet which covers compressor replacement techniques. Topics specifically covered are: "Why Compressors Fail," "Is it Necessary to Replace the Compressor?", "Standard Replacement Procedures," and "Eliminating Call Backs." Set includes 35 mm colored slides and a booklet.

ITEM	DESCRIPTION	MASTER PRICE
GTC-2	"Be Compressor Wise" Slide Set	$32.00

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Master price times a .7 multiplier, plus postage.

Additional information: Available through your local Carrier Distributor listed in the yellow pages of your telephone directory.

####

Identification Code: Slide Set and Script

Title: COOLING WATER TREATMENT

Description: Describes proper methods of cooling water treatment.

Appropriate for: Two-Year College Course

Source: Calgon Corporation
Wholesaler Department
P.O. Box 1346
Pittsburgh, Pennsylvania 15230

Terms: Available on loan

Additional information: 35 mm color slide set; 50 slides per set.
Script narration takes about 25 minutes.
Replaces filmstrip and record.

####

Identification Code: SVT-E1 (Service Training)

Title: BASIC ELECTRICITY

Description: Booklet and slide presentation on basic electricity as applied to air conditioning.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-E2 (Service Training)

Title: GAS FURNACE ELECTRICAL CIRCUIT

Description: Booklet and slide presentation on wiring system of a typical gas furnace.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-E3 (Service Training)

Title: COOLING SYSTEM ELECTRICAL CIRCUIT

Description: Booklet and slide presentation of a typical cooling unit electrical circuit.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-E4 (Service Training)

Title: TOTAL COMFORT SYSTEM ELECTRICAL CIRCUIT

Description: Booklet and Slide presentation of a residential total comfort electrical system.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-E5 (Service Training)

Title: ELECTRICAL TROUBLE SHOOTING

Description: Booklet and Slide presentation on use of test equipment and procedures for trouble shooting air conditioning systems.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-HP1

Title: INTRODUCTION TO HEAT PUMPS

Description: Booklet and Slide presentation introducing the concept of reverse cycle heating and cooling.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: SVT-HP 2

Title: CONVENTIONAL HEAT PUMP CYCLE

Description: Booklet and Slide presentation on the operation of a conventional heat pump cycle.

Appropriate for: High School Course; Two-Year College Course

Source: Westinghouse CRAC Division
P.O. Box 2510, Staunton, Virginia 24401

Terms: Booklet $.40 -- Set of Slides $10.00

####

Identification Code: BTC-1003-66

Title: THE ABC'S OF AVOIDING BURNOUT CALL BACKS

Description: 72 slides (color) complete with student review booklet covers common causes of hermetic compresser burnout, how to connect and how to clean-up.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Inquire for cost details.

####

Identification Code: BTC-1012-67

Title: HOW TO CALCULATE HEAT GAIN - HEAT LOSS

Description: 54 slides (color) complete with student review booklet BTC-316-67. Step by step procedure demonstrated to calculate heat gains and losses.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

####

Identification Code: BTC-1013-67

Title: BASIC MECHANICAL REFRIGERATION CYCLE

Description: 27 slides (35 mm, color) complete with Student Review Booklet BTC-319-67. In depth study of component of mechanical refrigeration system.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

####

Identification Code: BTC-1014-67

Title: THEORY OF REFRIGERATION

Description: 35 color slides (35 mm) complete with Student review booklet, theory and principals of mechanical refrigeration.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

####

Identification Code: RSI

Title: RESIDENTIAL AIR CONDITIONING

Description: Covers basic Air Conditioning and Refrigeration Principles, Air Conditioning systems, Honeywell controls, and Trouble Shooting hints. 109 (35 mm) Slides and Script.

Appropriate for: High School Course; Two-Year College Course

Source: Local Honeywell Branch Office - Residential Division
Branch Sales Manager

Terms: Free upon request. (Available on loan.)

####

TEACHING MODELS AND TRAINERS

Identification Code: None

Title: STRUCTURAL TEACHING MODELS

Description: A number of models are available to teach basic principles of structure. These include: Column Buckling, Column Behavior, Stresses and Strains, plus many others.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
200 South Twelfth Avenue
Marshalltown, Iowa 50158

Terms: Net cash, FOB Marshalltown. Price list on request.

Additional information: These models have been developed in conjunction with Harvard University Graduate School of Design and currently are being used in a number of different schools at the university level.

####

Identification Code: FV-1

Title: FLO-VU WATER TABLE AND SUMP

Description: This is a water table designed to fit on top of an overhead projector and it has a self-contained sump for the circulation of water. By use of inserts into this basic table, air patterns within a house for different register locations, return air locations and so forth can be studied. A tracing dye or graphite is used so that the air patterns can be projected on a large screen and aspiration, entrainment, turbulence, etc. can be identified.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
P.O. Box 250, Department A-15
Marshalltown, Iowa 50158

Terms: $425.00 for basic unit plus from $30 to $50 each for various inserts.

####

Identification Code: EB-1 and EB-2

Title: HEATING-COOLING ELECTRICAL SCHEMATIC (GAS) EB-1
HEATING-COOLING ELECTRICAL SCHEMATIC (ELEC) EB-2

Description: Model EB-1 shows the schematic wiring for a gas furnace with add-on air conditioning and a series of switches allow this circuit to be energized in sequence so the student can learn schematic wiring diagrams and function of components in the circuit.
Model EB-2 is the same except that this is for an electric furnace with add-on air conditioning.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
P.O. Box 250, Department A-15
Marshalltown, Iowa 50158

Terms: EB-1 is $400.00. EB-2 is $400.00.

####

Identification Code: RT-1 and RT-2

Title: RT-1 REFRIGERATION SYSTEM TRAINER
RT-2 HEAT PUMP SYSTEM TRAINER

Description: Model RT-1 shows a complete refrigeration circuit with a series of switches which allow this circuit to be illuminated in steps so that the function of each can be explained.
Model RT-2 is similar to the above but shows the heat pump system with a reversing valve which will visually reverse the cycle when the thermostat has shifted from heating to cooling. The board is color-coded so that when it does reverse, the indoor and outdoor coils change color and the reversing valve actually moves from one position to the other.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
P.O. Box 250, Department A-15
Marshalltown, Iowa 50158

Terms: RT-1 is $400.00. RT-2 is $535.00.

####

Identification Code: ST-1 and ST-2

Title: ST-1 2 TON COMPRESSOR SERVICE TRAINER
ST-2 BASIC ELECTRICITY TRAINER

Description: Model ST-1 is a trainer which has all of the basic components of a residential size air conditioner. By flipping switches on the back of the board, 17 different faults can be introduced and on the front face of the board, various components will read electrically exactly as they would in the field. In addition, the board will sound like a compressor; that is it will cycle on the overload or make the humming noise when it is trying to start.
The ST-2 Basic Electricity Trainer is a series of banana plugs, sockets, etc. to allow wiring of series parallel and control circuits. Student manuals are provided with each of the above trainers.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
P.O. Box 250, Department A-15
Marshalltown, Iowa 50158

Terms: ST-1 is $650.00. ST-2 is $200.00.

Additional information: These trainers are part of an overall job related course for servicemen. They are used in Phase 1 and Phase II.

####

Identification Code: GT-1

Title: GAS SERVICE DEMONSTRATOR/TRAINER

Description: This is a demonstrator/trainer to show the operation of the gas valve pilot and burner in a gas furnace. It contains a tank of bottled gas so that the burner can actually be fired and appropriate measurements take in a thermocouple, gas valve, etc.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
P.O. Box 250, Department A-15
Marshalltown, Iowa 50158

Terms: $200.00

####

Identification Code: See below

Title: CYCLE TRAINER

Description: An authentic air conditioning unit designed for classroom use. Meters, gages, thermometers, and sightglasses have been added at strategic points in the system to permit observation and measurement of data vital to understanding system operation. An Instructor's Guide is supplied with the trainer outlining numerous demonstrations and experiments. Included is also a complete set of Carrier GTR Training Series Booklets - "Fundamentals of Refrigeration."

ITEM	DESCRIPTION	MASTER PRICE
76CT-104	Cycle Trainer	See "Terms"
76CT-01	Instructor's Guide for Cycle Trainer	$.25

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Current prices, availability and ordering are handled by the Carrier Parts Center in Syracuse.

Additional information: Available through your local Carrier Distributor listed in the yellow pages of your telephone directory.

####

STRIP FILM AND RECORD/CASSETTE SETS

Identification Code: See below

Title: AIR CONDITIONING FUNDAMENTALS

Description: Sound slide film with 35 mm strip film in color, plus 33-1/3 RPM records. Text and reference booklets for each set. (see below)

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York, 13201

Terms: Master Price Times A .7 multiplier, plus postage.

Additional information: Also available through local Carrier distributors, listed in the Yellow Pages of your Telephone Directory.

AIR CONDITIONING FUNDAMENTALS

These training aids are of two types:

1) A Sound Slide Film consisting of a 35 mm strip film in color, plus 33-1/3 RPM records with audible "beep". Total running time in minutes for records is shown in parentheses at the end of each description.

2) A Text and Reference Booklet which consists of a copy of the presentation script with reproduction of the visuals, work session and a quiz.

SOUND SLIDE FILMS

Code No.	Description	Master Price
200 SF1	INTRODUCTION - A basic, 3 part presentation illustrating the methods by which the body disposes of heat and regulates body temperature; the influence of temperature, humidity, and air motion on human comfort; the components, functions, and operating principles of an air conditioning system; the refrigeration cycle. (28)	$32.00
200 SF3	PSYCHROMETRICS - Covers the behavior of air vapor mixtures; step-by-step explanation of the psychrometric chart; cooling, dehumidifying, heat and evaporative cooling processes. Use of the chart in determining properties and solving problems included. (33)	32.00

Code No.	Description	Master Price
200 SF4	LOAD ESTIMATING - Describes the factors pertaining to heat gain and heat loss which must be considered when estimating cooling and heating loads; the effect of solar heat on glass, walls, and roof; the methods of reducing heat gain or loss, storage effect and need for zoning in multi-room applications. (43)	$32.00
200 SF7	AIR SIDE - Discusses the function of fans, outlets, and ducts in an air distribution system and the principles of air distribution for heating and cooling applications; the procedure for designing duct systems, using the ASHRAE duct friction chart. (43)	$32.00
	TEXT & REFERENCE BOOKLETS	
T200-01	INTRODUCTION (See 200 SF1)	$1.00
T200-03	PSYCHROMETRICS (See 200 SF3)	$1.00
T200-04	LOAD ESTIMATING (See 200 SF4)	$1.00
T200-07	AIR SIDE (See 200 SF7)	$1.00

####

Identification Code: RFT-210-121-3

Title: "PUT 'EM IN RIGHT", AND, "SHOOTIN' SERVICE"

Description: This audio/visual utilizes 35 mm all color strip film and 33-1/3 RPM record to present its message. The record and film provides the viewer with the check points for the proper installation and servicing of thermostatic expansion valves. The presentation deals more with the practical than with the purely theoretical side of refrigeration and air conditioning service.

Appropriate for: High School Course; Two-Year College Course

Source: Sporlan Valve Company
7525 Sussex Avenue
St. Louis, Missouri 63143

Terms: Available on loan to schools at no charge. Address inquiries to: Education and Training Department.

####

Identification Code: (By Title Below)

Title: (A) "THE LEADER STEPS OUT"
(B) "COMFORT CONTROL"
(C) "MECHANICAL CENTER"

Description: Each a 35 mm, color film with accompanying narrating cassett running about 15 minutes.

Appropriate for: High School Course; Two-Year College Course

Source: Tyler Refrigeration Division, Clark Equipment Co.
c/o Ray L. Greene - Director - Food Industry Development
1329 Lake Street, Niles, Michigan 49120

Terms: Available on loan without charge -- suggest request 30-45 days in advance of date desired. Purchase price of each film strip and cassett set is $18.00.

Additional information: Recommend use with a Du-Kane micromatic projector Model #28A9.

####

Identification Code: BTC-1007-67

Title: THE ABC'S OF CENTRAL AIR CONDITIONING

Description: 36 minute filmstrip with records complete with student review booklet BTC-307-67. Covers human comfort, air-cycle in man's daily environment, operation of mechanical and absorption refrigeration machines.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Co.
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

####

Identification Code: BTC-1011-67

Title: AIR DISTRIBUTION DESIGN

Description: 26 minute filmstrip and record complete with student review booklet BTC-322-68. Uses equal friction method in determining equivalent duct lengths.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Co.
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

####
99

Identification Code: BTC 1035-70

Title: BASIC HYDROMECHANICS

Description: 36 minute film strip and records complete with excellent programmed learning type student book, BTC 357-69.

Appropriate for: Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase. Inquire for cost details.

Additional information: Covers chilled water diping systems that are vented to the atmosphere.

####

Identification Code: RFT-210-121-1

Title: "THE TEV STORY ... THEORY OF OPERATION"

Description: This audio/visual presentation utilizes 35 mm all color strip film and magnetic tape voice recording at 3-3/4 IPS to describe the thermostatic expansion valve's theory of operation and application. Emphasis is placed upon superheat and the three fundamental pressures that actuate the valve because these pressures must be thoroughly understood if any real knowledge of the thermostatic expansion valve is to be gained. Running time of the audio/visual is 45 minutes.

Appropriate for: Two-Year College Course

Source: Sporlan Valve Company
7525 Sussex Avenue
St. Louis, Missouri 63143

Terms: Available on loan to schools at no charge. Address inquiries to: Education and Training Department.

Additional information: Although the content of this presentation is not highly technical, full appreciation of the subject matter requires some prior knowledge of the refrigeration cycle as well as the refrigeration and air conditioning machinery that makes it function.

####

SLIDE

RECORD

SETS

Identification Code: GTR Series

Title: FUNDAMENTALS OF REFRIGERATION

Description: Slide Record Sets with 2 x 2 colored slides and review booklet in color. (16 Chapters; see below and following pages.)

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Master Price Times A .7 Multiplier, plus postage.

Additional information: Also available through local Carrier distributors. Listed in the Yellow Pages of your Telephone Directory.

FUNDAMENTALS OF REFRIGERATION

SLIDE RECORD SETS

This series of slide record sets constitutes a course in Fundamentals of Refrigeration.

Each individual set consists of 33-1/3 RPM records, 35 mm color slides and a printed lecture or slide review booklet.

This GTR Series can be used as the basis for a good training course in refrigeration fundamentals. The course is easy to understand since the lecture is expressed in the simplest terms and the illustrations are reduced to fundamental concepts. Can be presented to a class with minimum preparation and effort.

Additional slide review booklets in full color are available for each set to be used as handout material for the student. After completion of the course, the set of booklets becomes a handy reference library.

SLIDE RECORD SETS

Total running time in minutes for records is shown in parentheses at end of each description.

Code No.	Description	Master Price
GTR-1	Definitions - Common terms are defined and illustrated. A basic review of elementary physics in which heat, temperature, pressure, etc. are explained. (34)	$20.00

Code No.	Description	Master Price
GTR-2	Refrigeration Cycle - Open and closed cycle described. Basic system components shown and purpose described. Pressure-temperature chart and refrigerant boiling points also covered. (30)	$25.00
GTR-3	Compressors - Acquaints the student with functions, types, power sources, operation, parts, lubrication, and compressor capacity. (48)	$32.00
GTR-4	Condensers - Receivers - A look at condenser theory, water, air and evaporative condensers as well as the part that a receiver plays in the system. (25)	$20.00
GTR-5	Evaporators - Evaporator theory, heat balance, types and secondary systems. (26)	$21.00
GTR-6	Metering Devices - Theory, types, operating principles and pressure throughout low side. (42)	$25.00
GTR-7	Basic Cycle Controls - Definition, primary and secondary controls, principles of operation and use. (55)	$28.00
GTR-8	Refrigerant Characteristics - Thermodynamics and physical properties of most common refrigerants. (38)	$28.00
GTR-9	Refrigerant Oils - Requirements, classification and characteristics of refrigerant oils. (33)	$28.00
GTR-10	Accessories - Major system accessories, principles of operation and most common usage. (27)	$22.00
GTR-11	Piping - Requirements, proper piping practice, oil return, insulation and hangers. (34)	$24.00
GTR-12	Dehydration - Moisture, source, effect, determination, and removal. (40)	$22.00
GTR-13	Charging and Discharging Systems - Methods and measurement in adding refrigerant to and removing refrigerant from a system. (48)	$30.00
GTR-14	Installation Procedures - Equipment - Equipment placement, piping, electrical, sheet metal, check test and start. (39)	$30.00
GTR-15	Multiple Systems - How use in multiple affects the application of compressors, evaporators, condensers and metering devices. (27)	$25.00
GTR-16	Trouble Shooting - Most common problem with basic cycle components, their cause and correction. (40)	$25.00

SLIDE REVIEW BOOKLETS

Student booklets containing slide and script reproduction in color.
Available in Chapters 1 through 16 inclusive.

Code No.	Description	Master Price
GTR1-201	DEFINITIONS	.60¢
GTR2-201	REFRIGERATION CYCLE	.60¢
GTR3-201	COMPRESSORS	.60¢
GTR4-201	CONDENSERS - RECEIVERS	.60¢
GTR5-201	EVAPORATORS	.60¢
GTR6-201	METERING DEVICES	.60¢
GTR7-201	BASIC CYCLE CONTROLS	.60¢
GTR8-201	REFRIGERANT CHARACTERISTICS	.60¢
GTR9-201	REFRIGERANT OILS	.60¢
GTR10-201	ACCESSORIES	.60¢
GTR11-201	PIPING	.60¢
GTR12-201	DEHYDRATION	.60¢
GTR13-201	CHARGING AND DISCHARGING SYSTEMS	.60¢
GTR14-201	INSTALLATION PROCEDURES	.60¢
GTR15-201	MULTIPLE SYSTEMS	.60¢
GTR16-201	TROUBLE SHOOTING	.60¢
GTR16-102	ROTARY TROUBLE CHART - Complete refrigeration trouble chart in disc form for use with Chapter 16.	$1.00

####

Identification Code: GTE Series (9 Chapters)

Title: APPLIED ELECTRICITY - AIR CONDITIONING

Description: Slide Record Sets with 2 x 2 slides and review booklet. (See below and following page)

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Master Price Times A .7 Multiplier, plus postage.

Additional information: Also available through local Carrier distributors. Listed in the Yellow Pages of your telephone Directory.

APPLIED ELECTRICITY - AIR CONDITIONING

SLIDE RECORD SETS

Set consists of 33-1/3 RPM records, 35 mm slides and one copy of the slide review booklet. Physical make-up same as GTR. Total running time in mimutes for records is shown in parentheses at end of each description.

Code No.	Description	Master Price
GTE-1	Wiring Symbols - Introduces symbols, describes the device represented by the symbol, and its normal purpose in the circuit. (46)	$24.00
GTE-2	The Wiring Diagram - Develops the essential electrical elements of the circuit. Builds the basic schematic wiring diagram. (34)	$23.00
GTE-3	Diagram Exercises - Carries the schematic diagram forward into more complex circuits. (34)	$25.00
GTE-4	Electric Meters - Shows and describes the various types of meters and describes their use in trouble shooting. (38)	$23.00
GTE-5	Alternating Current - Simple descriptions of A.C. Terms for the service mechanic. (28)	$27.00
GTE-6	Single Phase Motors - Develops electrical requirements and covers different ways they can be fulfilled. Shaded pole, split phase, P.S.C. and C.S.R. (41)	$23.00

Code No.	Description	Master Price
GTE-7	Single Phase Motors - Testing various types of single phase motors and how to check them. (32)	$26.50
GTE-8	Motor Protective Devices - Types, how they operate location, motor protection systems. (39)	$26.00
GTE-9	Trouble Shooting - The Check Test - Eliminate method of electrical trouble shooting in air conditioning. (32)	$18.50

SLIDE REVIEW BOOKLETS

Slide review booklets containing slide and script reproduction. Available in Chapters 1 through 9 inclusive.

GTE1-101	WIRING SYMBOLS	.50¢
GTE2-101	THE WIRING DIAGRAM	.50¢
GTE3-101	DIAGRAM EXERCISES	.50¢
GTE4-101	ELECTRIC METERS	.50¢
GTE5-101	ALTERNATING CURRENT	.50¢
GTE6-101	SINGLE PHASE MOTORS	.50¢
GTE7-101	SINGLE PHASE MOTORS	.50¢
GTE8-101	MOTOR PROTECTIVE DEVICES	.50¢
GTE9-101	TROUBLE SHOOTING	.50¢

####

Identification Code: GTA Series

Title: GENERAL TRAINING - ADVANCED

Description: Slide Record Sets with 2 x 2 colored slides and review booklet in color. (See below)

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Master Price Times A .7 Multiplier, plus postage.

Additional information: Also available through local Carrier distributors. Listed in the Yellow Pages of your Telephone Directory.

GENERAL TRAINING - ADVANCED

SLIDE RECORD SETS

Same physical make-up as GTR and GTE.

Code No.	Description	Master Price
GTA-1	Oil Refrigerant Migration - The cause, effect and prevention of crankcase dilution. (42)	$25.50
GTA-2	Cleanout After Burnout - A discussion on the various methods and their relative merits. (40)	$24.00
GTA-3	Air, Air Problems & Measurement - Deals with the various problems of air handling and in a manner easily understood by the serviceman. (61)	$27.50
GTA-4	Heat Pumps - Cover the theory of operation and control of the heat pump, primary dealing with small packaged equipment. (70)	$32.00
GTA-6	Gas Heat - Covers the theory of heating with gas and its application to heating equipment. (42)	$27.50

SLIDE REVIEW BOOKLETS

Slide review booklets containing the slide and script reproduction in color available for above sets.

GTA1-101	OIL REFRIGERANT MIGRATION	.60¢
GTA2-101	CLEANOUT AFTER BURNOUT	.60¢
GTA3-101	AIR, AIR PROBLEMS & MEASUREMENT	.60¢
GTA4-101	HEAT PUMPS	.60¢
GTA6-101	GAS HEAT	.60¢

Identification Code: See Below

Title: ELECTRICITY AND HOW IT WORKS

Description: A slide record set and review booklet on "Electricity and How it Works." Slide record set includes a 33-1/3 RPM record, 75 colored 35 mm slides and a review booklet with quiz. Review booklet in full color is also available separately.

ITEM	DESCRIPTION	MASTER PRICE
VTE-1	Slide Record Set	$30.00
VTE1-201	Slide Review Booklet	.60

Appropriate for: High School Course; Two-Year College Course

Source: Carrier Air Conditioning Company
Carrier Parkway
Syracuse, New York 13201

Terms: Master price times a .7 multiplier, plus postage.

Additional information: Available through your local Carrier distributor listed in the yellow pages of your telephone directory.

####

Identification Code: 829287 - Film Strip (35mm color)

Title: SERVICING ELECTRIC FURNACES

Description: Explains the controls, circuitry, servicing procedures and teardown for Whirlpool electric furnaces and duct heaters.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $1.50 each - Cassette Tape: $2.50.

Additional information: Cassette tape narrative, Part No. 829288, "Servicing Electric Furnaces."

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829289 - Film Strip (35mm color)

Title: THE WHIRLPOOL HORIZONTAL GAS FURNACE

Description: Illustrates the controls, circuitry, servicing procedures and teardown for Whirlpool gas horizontal furnaces.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $1.50 each - Cassette Tape: $2.50

Additional information: Cassette tape narrative, Part No. 829290, "The Whirlpool Horizontal Gas Furnace."

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

Identification Code: 829291 - Film Strip (35mm color)

Title: THE WHIRLPOOL HUMIDIFIER

Description: Illustrates the installation, controls, circuitry and servicing procedures for both the Whirlpool duct and plenum-mounted humidifiers.

Appropriate for: High School Course; Two-Year College Course

Source: Whirlpool Corporation - Publication Department
229 Factory Street
La Porte, Indiana 46350

Terms: $1.50 each - Cassette Tape: $2.50

Additional information: Cassette tape narrative, Part No. 829292, "The Whirlpool Humidifier."

Film takes from 1 to 3 hours depending upon group leader, group, and the materials being used along with the film.

####

SOUND

MOTION

FILMS

Identification Code: None

Title: "SEARCH FOR TOTAL COMFORT"

Description: 16 mm colored-sound film. Running time approximately seventeen (17) minutes. Includes all of the elements required for a total comfort system, including heating, air conditioning, humidification, de-humidification and fresh air. Story line takes a couple through their investigation with regard to heating and air conditioning in their new home.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
200 South Twelfth Avenue
Marshalltown, Iowa 50158

Terms: Available on loan through film library of Modern Talking Picture Service, c/o Roa's Films, 1696 North Astor Street, Milwaukee, Wisconsin 53202.

Additional information: A non-commercial film designed for showing on T.V. stations, to service clubs, or other groups interested in Total Comfort.

####

Identification Code: None

Title: "SCHOOLS ARE BUILT FOR LEARNING"

Description: 16 mm colored-sound film. Running time approximately twenty-three (23) minutes. Subject matter includes the construction of system schools with the SCSD concept, in various sections of the country. Many of the questions involved in planning a system school, as well as the results which can be expected, are shown.

Appropriate for: High School Course; Two-Year College Course

Source: Lennox Industries, Inc.
200 South Twelfth Avenue
Marshalltown, Iowa 50158

Terms: Available on loan through film library of Modern Talking Picture Service, c/o Roa's Films, 1696 North Astor Street, Milwaukee, Wisconsin 53202.

Additional information: The film was designed for presentation to school boards, architects and educators and also includes a five (5) minute special trailer at the end on vocational-technical schools.

####

Identification Code: BTC 1036-70

Title: INSTALLATION AND START UP PROCEDURES FOR NH_3 ABSORPTION MACHINE

Description: 3 hour 35 minute sound color movie. Includes trouble shooting of electrical circuit.

Appropriate for: High School Course; Two-Year College Course

Source: Bryant Air Conditioning Company
7310 West Morris Street
Indianapolis, Indiana 46231

Terms: Purchase or rent. Inquire for cost details..

####

Identification Code: None

Title: INDUSTRIAL EXHAUST FILM

Description: 16 mm film in color, with sound, 14 to 16 minutes. Film deals with hood designs, air velocities, etc. for industrial ventilation and dust collection.

Appropriate for: Two-Year College Course

Source: American Air Filter Company, Inc.
215 Central Avenue
Louisville, Kentucky 40208

Terms: Free on loan basis. Suggest lead time of 3 to 4 weeks.

####

Identification Code: None

Title: HOSPITAL SEPSIS

Description: Film was produced by Johnson and Johnson and is 16 mm, in color, with sound. Approximate showing time is 25 minutes. As the title indicates this film deals with the control of bacteria in hospitals and the source of infections.

Appropriate for: Two-Year College Course

Source: American Air Filter Company, Inc.
215 Central Avenue
Louisville, Kentucky 40208

Terms: Free on loan basis. Suggest lead time of 3 to 4 weeks.

####

FIELD

SERVICE

TRAINING

MOBILE

LABORATORY

Identification Code: FIELD SERVICE TRAINING - MOBILE LABORATORY

Title: RESIDENTIAL AIR CONDITIONING

Description: Service techniques for components and systems including contactors, relays, pressure controls, transformers and control panels.

Appropriate for: Two-Year College Course

Source: Local Honeywell branch - Residential Division

Additional information: 8 hour course conducted in conjunction with 40 foot tractor-trailer which has been outfitted as complete laboratory for the hands-on training of servicemen, usually sponsored by industry wholesaler distributors in cooperation with Honeywell. Applications available through the Honeywell Residential Division branch office.

####

GUEST

LECTURERS

Identification Code: None

Title: GUEST LECTURERS

Description: Sporlan District Managers and Sales Engineers have a complete library of color-illustrated educational talks on a wide variety of subjects including thermostatic expansion valves, refrigerant distributors, moisture detection and removal, solenoid valves, flooded systems, heat pumps, and pressure regulating valves. Arrangements for these presentations may be made by contacting the Sporlan representative in your area, or the home office listed below.

Appropriate for: Two-Year College Course

Source: Sporlan Valve Company, Education and Training Department
7525 Sussex Avenue, St. Louis, Missouri 63143

Terms: Without Charge

####

Identification Code: None

Title: GUEST LECTURERS

Description: Alco field engineers are always available for educational programs featuring slide programs and/or product demonstrations. These programs are custom tailored by the field engineer for the audience involved.

Appropriate for: High School Course; Two-Year College Course

Source: Alco Controls Division - Emerson Electric Co.
Marketing Services Department
Box 12700, St. Louis, Missouri 63141

Terms: Without charge. But contact the Marketing Services Department first, who will in turn, contact the field engineer in the appropriate territory.

####

SERVICE TRAINING MATERIALS FOR

TRANSPORT REFRIGERATION MECHANICS

Identification Code: See below.

Title: SERVICE TRAINING MATERIALS FOR TRANSPORT REFRIGERATION MECHANICS

Description: See below.

Appropriate for: High School Course; Two-Year College Course

Source: Thermo King Corporation
314 West 90th Street Minneapolis, Minnesota 55420

Terms: See below.

Additional information: Thermo King Corporation will provide equipment on memo billing for those schools that will provide a specific course outline which leads to employment in this service trade. For information, write to Mr. Walter W. Klauser, Training Director, Thermo King Corporation.

Code No.	Material	Price
	FILM KITS (INCLUDES 35 MM FILM STRIP, SOUND RECORD & READER'S SCRIPT)	
3273-2	Basic Electrical Circuits (Does not include Trouble Shooting)	$8.50
61-2	Air Pressure Defrost Switch	2.65
61-3	Timing the Injection Pump	5.50
61-4	Check and Adjust 3 & 4 Switch Thermostat	5.50
61-5	Checking and Servicing the Alternator	2.75
62-6	Thermo King Refrigeration System	8.00
	FILM BOOKLETS (FOR USE WITH FILM KITS)	
3273-2	Basic Electrical Circuits and Trouble Shooting	X
61-2	Air Pressure Defrost Switch	X
61-3	Timing the Injection Pump	X
61-4	Check and Adjust 3 & 4 Switch Thermostat	X
61-5	Checking and Servicing the Alternator	X
62-6	Thermo King Refrigeration System	X
	REFRIGERATION SYSTEM (WORK SHEETS (Blanks, 8-1/2" x 11")	
3696	Hot Gas Refrigeration System in color (8-1/2" x 11")	X
3696	Work Sheets - For the above (8-1/2" x 11") (Blanks)	X
3930	Hot Gas Refrigeration (Defrost Pressure Valve)	X
3931	ROL & SRL Reverse Cycle System (8-1/2" x 11") (Blanks)	X
5387	NWD, SRL, RL, KL - 3 Way Valve Refrigeration System (8-1/2" x 11") (Blanks)	X
3863	UWD - 3 Way Valve Refrigeration System (8-1/2" x 11") (Blank)	X

Code No.	Material	Price
5387-A	NWD, SRL, RL, KL - 3 Way Valve Refrigeration System/with legend	X
5685	Thermac 5 Refrigeration System (Blank)	X
5685-A	Thermac 5 Refrigeration System/with legend	X
5144	Refrigeration Troubleshooting Guide	X
5717	Refrigeration Troubleshooting Procedures	X
4989-1	Refrigeration Troubleshooting Indicators	X
4900	Service Valve Positions	X
5718	Expansion Valve Superheat Measurement	X
4499	Auto Air Conditioning Refrigeration Schematic	X
4652	Cab Air Conditioning Refrigeration Schematic	X
	ELECTRICAL WIRING DIAGRAMS (COMPLETE)	
3011C14	MWC-30	X
3026C90	XKL/XROL-30	X
3882	NWD-30 (Old Style)	X
5704	NWD-30 M100 (New Style)	X
5477	NWD-50	X
3890	UWD-30 (with Westinghouse Alternator)	X
5427	Crown 500 (with Thermac 5 & Thermoguard Thermostat) Std.	X
	ELECTRICAL WIRING BLANKS (WORK SHEETS)	
3855-B	SRL/RL-30 (Blank)	X
	SRL/RL (Individual circuit Series)	X
3855-A	Charge Indicating Circuit	X
3855-C	Running Circuit on Cool Cycle	X
3855-D	Cranking Circuit	X
3855-E	Heating Circuit	X
3855-F	Defrost Circuit	X
3855	SRL/RL -50 (Blank)	X
3859-1	NWD 62-30 (Blank)	X
	REFRIGERATION WALL CHART SET	
	Three different systems, cooling and heating cycles (Value $100.00)	Loan
	KITS (ON LOAN BASIS) - (AVAILABLE FROM FIELD SERVICEMEN OR MINNEAPOLIS OFFICE)	
	Air pressure defrost switch	Loan
	Mounted 3 switch thermostat	Loan
	Portable refrigeration panel & mock-up (Including cut-a-way parts)	Loan

Code No.	Material	Price
	THERMO KING FIELD SERVICEMENT MATERIALS	
1252-SV	Training Report Form (T.K. Field Servicemen Reports)	X
3088	Training Schedule - T. K. Factory Service School Schedule Request by Title	X
	SUGGESTED STUDY GUIDE (ASSIGNMENT SHEETS) - Order by Title	
3135-2	Fundamentals of Refrigeration	X
4959	To Study the Thermo King Compressor	X
3137-2	Refrigeration Cycle	X
3138-2	Construction & Operation of Refrigeration Parts	X
5719	Troubleshooting the Refrigeration System	X
4296	Construction & Operation of the CCK Engine	X
4297	Construction & Operation of the ICK Engine	X
4298	Construction & Operation of the OM636 Engine	X
4958	Construction & Operation of the Motorola Alternator System	X
	INSTRUCTION BOOKS	
4035	Thermo King Basic Refrigeration (Factory Service School Text)	X
3933-1	Thermo King Service Tool Catalog	X
3394	Thermo King Unit Wiring Diagrams (with regular cover)	$6.25
	With hard cover, 3 ring binder, and updated new diagrams mailed each six months)	$10.00
4780	Standard basic Operation, Installation, & Maintenance Manual for Auto Air Conditioning	.25
203-9005	Auto Air Conditioning Service Manual	$3.50
3272-2	Basic Electrical Circuits & Troubleshooting	$1.00
4739-1	Diesel Electrical Circuits & Troubleshooting	$2.50

(Items Marked "X" - No Charge - Right reserved to limit quantities)